

PROGRAM

Saturday and Sunday

March 25-26, 2000

Morning and Afternoon

Madera and Mariposa

Short Course – “Modern Sampling Techniques for Gas Chromatography”

Dr. Nicholas H. Snow, Associate Professor at Seton Hall University

Dr. Hans-Gerd Janssen, Uniliever Laboratories in the Netherlands

The two day program will include extensive discussions of classical and large volume injection techniques and extraction methods, including liquid-liquid extraction, solid phase extraction, solid phase micro-extraction, and headspace extraction. Time is provided for discussion and comparison of techniques and for the participants to share their own experiences.

Monday

March 27, 2000

Morning

Grand Tenaya Ballroom (Salon 1 and 2)

Plenary Session

Chair: Mark Lee

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|------|---|-------------------|
| 0830 | Welcome | |
| 0845 | Introductions | |
| 0915 | Sandia's μ ChemLab TM Program
<i>Alan Sylwester, Sandia National Laboratory</i> | (Abstract: Ab-65) |
| 1000 | Vendor Exhibits – The Grand Foyer
<i>Refreshments will be served.</i> | |
| 1030 | Biopesticides for the 21 st Century
<i>Pamela Marrone, Agra Quest</i> | (Abstract: Ab-39) |
| 1115 | Food Safety: Consumer Issues and Priorities
<i>David Schmidt, International Food Information Council</i> | (Abstract: Ab-55) |
| 1200 | Lunch | |

Monday

March 27, 2000

Afternoon: Session A

Grand Tenaya Ballroom (Salon1)

Pesticide Analyses in Private Laboratories

Chair: Lourminia (Mimi) C. Sen

- 1330 A Laboratory's Perspective on Pesticide Residue and Food Safety
Grant Michelson, Michelson Laboratories (Abstract: Ab-44)
- 1400 Analyses of Regulated Chemicals in Drinking Water
Roberto Cabrera, Clinical Laboratory, Inc. (Abstract: Ab-8)
- 1430 Low Level Analyses of Phenoxy Herbicides by LC/MS
Brad Anderson, APPL Laboratory (Abstract: Ab-2)
- 1500 **Vendor Exhibits** – The Grand Foyer
Refreshments will be served.
- 1530 Documentation Essentials and Chain of Custody in the Analytical Laboratory
Larissa Schuster, Central California Research Laboratory (Abstract: Ab-56)
- 1600 Eurofins Scientific Group – Pesticide Residue Center Europe
Günter Lach, WEJ Laboratories (Abstract: Ab-33)

Monday

March 27, 2000

Afternoon : Session B

Grand Tenaya Ballroom (Salon 2)

Regulatory Program Update

Chair: Nirmal Saini

- 1330 Year 2000 Food Quality Protection Act Updates
Jake Mackenzie, USEPA (Abstract: Ab-38)
- 1400 Current Approach to Recommending the Food Quality Protection Act
Safety Factor for Use in Human Risk Assessment
Ed Zager, USEPA (Abstract: Ab-76)
- 1430 Florida Department of Agriculture Pesticide Residue Program Updates
Joanne Brown, Florida Department of Agriculture and Consumer Affairs (Abstract: Ab-7)
- 1500 **Vendor Exhibits** – The Grand Foyer
Refreshments will be served.
- 1530 Contemporary Pesticide Data Program Issues
Robert Epstein, USDA (Abstract: Ab-19)
- 1600 The World of Organic Food Production
Ray Green, CDFA (Abstract : Ab-24)
- 1630 FDA Total Diet Study Updates and Highlight of Recent Activities
Charles Parfitt, Jr., USFDA (Abstract: Ab-50)

Hands-on Training

- 1330 Pesticide Method Development
C. Kai Meng, Agilent Technologies

This workshop will give the attendees an overview of the tools and techniques to quickly identify 567 pesticides and suspected endocrine disrupters with minimum false positives and false negatives. The target audiences are method developers, instrument users, lab managers, and QA/QC officers.

Social Mixer / Poster Viewing (Authors not Present)

- 1730 Informal Discussions and Networking
 Beverages & hors d'oeuvres will be served. – “*No Host Bar*”

POSTER TITLES AND AUTHORS' INDEX**GC AND GC/MS**

- GC-01 **Quantitation of Chlorpyrifos by Isotopic Dilution Using Solid Phase Microextraction and Selected Ion Monitoring GC/MS**
Stephen L. Crump, Westinghouse (Abstract: Ab-14)
- GC-02 **Residue Analysis of 1,3-Dichloropropene in Grapes by GC/MSD**
L.T. Yeh (Abstract: Ab-73)
- GC-03 **Auto Dual Column Confirmation Reporting Using Retention Time Locking**
C. Kai Meng, Agilent Technologies (Abstract: Ab-43)
- GC-04 **Significantly Improving Compound Identification by Coupling Retention Times to a Pesticide Mass Spectral Library**
C. Kai Meng, Agilent Technologies (Abstract: Ab-42)
- GC-05 **A GC/MS Method Used for Identification of Pesticides and Endocrine Disrupters in Foods**
C. Kai Meng, Agilent Technologies (Abstract: Ab-41)
- GC-06 **Tissue Analysis for Pesticide Residue by Simultaneous GC/MS Full Scan and GC/MSⁿ**
Pamela Hamlett, Texas Parks and Wildlife Department (Abstract: Ab-25)
- GC-07 **Methyl Isothiocyanate Leaching in an Ontario Tobacco Field**
Murray B. Belyk, Aventis Cropscience Canada Co. (Abstract: Ab-4)

- GC-08 **Improved Separation of Chlorinated Pesticides and Herbicides Through The Scientific Design of Stationary Phases for Gas Chromatographic Separations**
Gary Stidsen, Restek Corporation (Abstract: Ab-62)
- GC-09 **The Application Of Single Quadrupole Mass Spectrometers For Identification, Confirmation And Quantitation of Pesticide Residues**
Emily Sible, Waters Corporation (Abstract: Ab-59)
- GC-10 **Analytical Methods For Multiple Pesticide Residues In Eggs**
Steven J. Lehotay, U.S. Dept of Agriculture, Agriculture Research Service
 (Abstract: Ab-36)
- GC-11 **Comparison Of Large Volume Injection vs. Direct Injection For Analysis Of Chlorinated Pesticides Using Electron Impact And Negative Chemical Ionization GC/MS**
Elizabeth J. Tierney, Shimadzu Scientific Instruments (Abstract: Ab-66)
- GC-12 **Time of Flight Mass Spectrometry and Its Applications**
Jeff Borins, LECO Corporation (Abstract: Ab-77)

LC and LC/MS

- LC-01 **Simple and Rapid Determination of Bentazone, Inabafide and Fulsulfamide in Crops by HPLC and Confirmation by LC/MS**
Kimihiko Yoshii (Abstract: Ab-74)
- LC-02 **Simultaneous Determination of Clethodim and Its Oxidation Metabolites by HPLC**
Susumu Ishimitsu (Abstract: Ab-27)
- LC-03 **ESI LC/MS/MS Determination of Methamidophos Residue in Cotton Seed and Gin Trash**
Grace TJ, Bayer Corporation (Abstract: Ab-68)
- LC-04 **Methomyl Residue Analysis in Food Products as Part of the Multiresidue Insecticide Screen**
Elizabeth R. Tor, California Veterinary Diagnostic Laboratory System, Toxicology Laboratory, UC Davis (Abstract: Ab-69)
- LC-05 **Determination of Thiabendazole and Related Compounds in Fruit Juices Using a Novel Mixed-Mode Polymeric Sorbent**
Michael S. Young, Waters Corporation (Abstract: Ab-75)
- LC-06 **Multiresidue Analysis of Anticoagulant Rodenticides in Liver and Serum Samples**
Mine G. Palazoglu, California Veterinary Diagnostic Laboratory System, Toxicology Laboratory, UC Davis (Abstract: Ab-49)
- LC-07 **Glyphosate Application Rates Proportional To Shikimic Acid In Hard Red Wheat Plant Tissue**
Bob Loper, Food Safety and Environmental Stewardship Program (Abstract: Ab-37)

Sample Preparation

- SP-01 **Methods Optimization of Microwave Accelerated Solvent Extraction Techniques for Various Regulatory Compounds**
Greg Leblanc, CEM Corporation (Abstract: Ab-35)
- SP-02 **A Comparison of Supercritical Fluid Extraction and Solvent Extraction for the Determination of Organophosphorus Pesticide Residues in Cereals**
K. Norman, Central Science Laboratory (Abstract: Ab-47)
- SP-03 **Chlorothalonil Residue Analysis Using SPE**
Irene Cassias, U.S. Food and Drug Administration (Abstract: Ab-9)
- SP-04 **The Use Of Accelerated Solvent Extraction (ASE) For Analysis Of Trace Contaminants In Foods**
Jennifer Toth, Dionex Corporation (Abstract: Ab-70)
- SP-05 **Clean-Up Of Pesticide And Herbicide Containing Samples Using Carbon SPE**
Gary Stidsen, Restek Corporation (Abstract: Ab-63)

Other Topics

- OT-01 **The Basic Concepts of Pesticide Residue Analyses in Food Crops**
Keh-Chuh Ting, CDFA / Center for Analytical Chemistry (Abstract: Ab-67)
- OT-02 **A Monitoring Program for Export Fruits in Northeastern Brazil**
Adélia C. P. Araújo and Danuza L. Telles , Technological Institute of Pernambuco
(Abstract: Ab-3)
- OT-03 **Monitoring of Pesticide Residues in Domestic Commodities**
Il-Young Kim, Seoul Metropolitan Government Institute of Health and Environment
Garak Agricultural and Fishery Products Inspection Center (Abstract: Ab-31)
- OT-04 **Pesticide Residue Testing of Food in Singapore**
Chua Gek Cheng (Abstract: Ab-11)
- OT-05 **Laboratory Proficiency Testing for Pesticide Residue Analysis**
Amanda M. Earnshaw, Central Science Laboratory (Abstract: Ab-18)
- OT-06 **Detecting the Geographic Origin of Foods**
Brian W. Smith, Food Safety and Environmental Stewardship Program
(Abstract: Ab-60)
- OT-07 **Pesticides in Foods: Residue Profile in DPR Marketplace Surveillance Program**
Nu-may R. Reed, CDPR (Abstract: Ab-52)
- OT-08 **The Continuing Study of the Stability of Pesticide Standards**
Fernando Felix, CDFA / Center for Analytical Chemistry (Abstract: Ab-21)

Tuesday

March 28, 2000

Morning

Grand Tenaya Ballroom (Salon 1 and Salon 2)

Poster Session

Chair: Glenn Peoples

0830 Poster Viewing

1000 **Vendor Exhibits** – The Grand Foyer
Refreshments will be served.

1030 Poster Discussion

1200 **Lunch**

Tuesday

March 28, 2000

Afternoon: Session A

Grand Tenaya Ballroom (Salon 1)

New & Updated Technologies and Challenges

Chair: Lilia Rivera

1330 Techniques for Residue Analysis Using LC/MS
James Stry, Dupont (Abstract: Ab-64)

1400 Analysis of Carbamate Pesticides by LC/MS
Bob Classon, Shimadzu Scientific Instruments (Abstract: NA)

1430 Survey of Fertilizer Matrix Issues in the Analysis of Inorganic Soil and Water Contaminants
Bill Hall, IMC Global (Abstract: NA)

1500 **Vendor Exhibits** / The Exhibition closes this afternoon – The Grand Foyer
Refreshments will be served.

1530 Forestry Herbicide Residues in Plants of Interest to California Tribal People
Kean Goh, CDPR (Abstract: NA)

1600 Performance of the HP 6890 Series Micro-ECD: Achieving the Goal of Superior ECD
Performance through Design and Application
Chin Kai Meng, Agilent Technologies (Abstract: Ab-40)

1630 The Pulse Flame Photometric Detector, Theory of Operation and Applications in Trace Analytical Gas Chromatography
Norman Kirshen, Varian Inc. (Abstract: NA)

Hands-On Training

- 1330 The Care and Feeding of Your HPLC – A Basic Guide to Getting the Most Out of Your HPLC System !

Jim Savoy, Waters Corporation

This presentation will review most of the basic assumptions of HPLC and the precautions which, if followed, will give you the best performance that your system can provide. We will discuss solvent preparation, basic pump operation, different detector types and their basic operation. Simple HPLC troubleshooting will also be discussed.

Vendor Sessions

- 1800 Agilent Technologies - Agilent Technologies invites attendees to a Hospitality Session. Agilent would like to let you know more about the company and show you some very exciting new products introduced in 2000. The setting will be relaxed, so please join them for some interesting information and wine and cheese.

Quality Assurance

Chair: Terry Jackson

- 0830 A Description of the Southern States Check Sample Program *(Abstract: Ab-13)*
Joanne Cook, Florida Department of Agriculture and Consumer Affairs
- 0900 AOAC International Proficiency Program *(Abstract: Ab-22)*
Arlene Fox, AOAC International
- 0930 The Use of Proficiency Testing in the California Environmental Laboratory Accreditation Program *(Abstract: Ab-32)*
Jane Jenson, CDHS / ELAP
- 1000 **Break** – The Grand Foyer
- 1030 The Accreditation of Proficiency Sample Testing Providers *(Abstract: Ab-54)*
Roxanne Robinson, A2LA
- 1100 Operation of New EPA National Pesticide Standards Repository *(Abstract: Ab-61)*
Chuck Stafford, USEPA
- 1130 EU Proficiency Testing Schemes for Pesticide Residues in Fruit and Vegetables *(Abstract: Ab-16)*
André de Kok, Inspectie W&V
- 1200 **Lunch**

Wednesday

March 29, 2000

Morning: Session B

Grand Tenaya Ballroom (Salon 2)

Laboratory Data Management

Chair: Nirmal Saini

- 0830 Standards Repository Data Management System
Fernando Felix, CDFA / Center for Analytical Chemistry (Abstract: Ab-20)
- 0900 Data Logging in the CDFA Residue Program
John Bricarello, CDFA / Center for Analytical Chemistry (Abstract: Ab-6)
- 0930 Managing the USDA Pesticide Data Program Electronic Database
Roger Fry, USDA (Abstract: Ab-23)
- 1000 **Break** - The Grand Foyer
- 1030 Overview of FDA New Field Accomplishment and Compliance Tracking System (FACTS)
Charles Parfitt, Jr., USFDA (Abstract: Ab-50)
- 1100 Implementation of Commercial Laboratory Information Management System – Lab Vantage
Bill Steeber, CDHS (Abstract: NA)
- 1130 The SQC Function in LIMS Systems
Jeffery Cawley, Northwest Analytical Inc. (Abstract: Ab-10)

Wednesday

March 29, 2000

Afternoon

Tours

- 1230 Meet in Lobby & Pick up Boxed Lunches
- 1245 Depart Tenaya Lodge
- Tour A: Yosemite Valley Tour
- Tour B: Mariposa Old Town and Redwood Grove Tour
- 1845 Arrive at Tenaya Lodge

Wednesday

March 29, 2000

Evening

Grand Tenaya Ballroom (Salon 1 and 2)

Vendor Sessions

1930

ThermoQuest Corporation

Jack Cunniff

(Abstract: Ab-15)

After a long day of exploration, you're welcomed back to the ThermoQuest hospitality session for some food and drink together with an interesting, informative and entertaining look at various and recent applications involving LC-MS Ion Traps.

Thursday

March 30, 2000

Morning and Afternoon

Madera and Mariposa

Short Course - "Mass Spectral Deconvolution Techniques"

O. David Sparkman, Consultant in Mass Spectrometry

Jane Klassen, NIST Mass Spectral Data Center

A day-long lecture will be presented on the use of the National Institute of Standards and Technology (NIST) Automated Mass spectral Deconvolution and Identification System (AMDIS). AMDIS is used for obtaining pure spectra from complex reconstructed total-ion-current (RTIC) chromatograms and allows the confirmation of the presence or absence of target analytes. It is helpful in the identification of unknown artifacts using the NIST Mass Spectral Search (MSS) Program for Windows and the NIST/EPA/NIH Mass Spectral Database (NIST 98) as well as custom libraries.

The use of these two powerful programs with various GC/MS instrument manufacturers' data systems will be explored. If you bring a laptop computer with a CD-ROM drive, you can install a complete working version of the two programs along with a demo version of the NIST 98 Mass Spectral Database and interact with the presentation.

Thursday

March 30, 2000

Morning

Grand Tenaya Ballroom (Salon 1 and 2)

International Regulations and Food Testing Program

Chair: Mark Lee

- 0830 Codex Alimentarius Commission: Codex Committee on Pesticide Residues
Fred Ives, USEPA (Abstract: Ab-28)
- 0900 U.S. Participation in the Codex Committee on Pesticide Residues
Fred Ives, USEPA (Abstract: Ab-29)
- 0930 European Union (EU) Monitoring, Normalization and Harmonization Projects
André de Kok, Inspectie W&V (Abstract: Ab-17)
- 1000 **Break** - The Grand Foyer
- 1030 Single Laboratory Method Validation: FAO-IUPAC Report
Arpad Ambrus, FAO / IAEA (Abstract: Ab-1)
- 1100 Update on the Import Tolerance Policy
Christin Olinger, USEPA (Abstract: Ab-48)
- 1130 The Use of ISO-17025 for A2LA Accreditation of Pesticide Testing Laboratories
Roxanne Robinson, A2LA (Abstract: Ab-53)
- 1200 **Lunch**

Thursday

March 30, 2000

Afternoon

Grand Tenaya Ballroom (Salon 1 and 2)

International Regulations and Food Testing Program

Chair: Mark Lee

- 1330 Import Certification Program: Germany & European Union
Günter Lach, WEJ Laboratories (Abstract: NA)
- 1400 Monitoring Pesticide Residues in Agricultural Products in Japan
Toshihiro Nagayama, Tokyo Metropolitan Research Laboratory of Public Health (Abstract: Ab-46)
- 1430 Korea
Hee-Gon Kang, Seoul Metropolitan Government Institute of Health and Environment (Abstract: Ab-30)
- 1500 **Break** - The Grand Foyer
- 1530 Taiwan
Sue-Sun Wong, Taiwan Agricultural Chemicals and Toxic Substances Residue Institute (Abstract: Ab-72)
- 1530 Hong Kong
Kuk-Ying Chui, Hong Kong Government Laboratory (Abstract: Ab-12)

Thursday

March 30, 2000

Evening

Grand Tenaya Ballroom (Salon 1 and 2)

1700 Wine Chemistry & Wine Tasting
 Roger Boultons, Department of Viticulture / Enology, UC Davis

“ Wine is provided by California Wine Institute ”

Friday

March 31, 2000

Morning

Grand Tenaya Ballroom (Salon 1 and 2)

Symposium on Food Security

Chair: Lourminia (Mimi) C. Sen

0830 Weapons of Mass Destruction
 Rob Born, Federal Bureau of Investigation (FBI) (Abstract: Ab-5)

0900 Chemicals in Food
 Lourminia (Mimi) Sen, CDFA / Center for Analytical Chemistry (Abstract: Ab-58)

0925 Food Safety: Gerber Baby Food Perspective
 Susan La Vigne, Gerber Products Company (Abstract: Ab-34)

1000 **Break** - The Grand Foyer

1015 Exposure of Livestock to Chemicals; Potential Risk to the Food Chain
 Birgit Puschner, California Veterinary Diagnostic Laboratory (Abstract: Ab-51)

1045 Foodborne Pathogens and Human Illness; Adding Fresh Fruits and
 Vegetables to the Equation
 Linda Harris, UC Davis (Abstract: Ab-26)

1115 Agricultural Biotechnology and Food Safety
 James Seiber, USDA / Western Regional Research Laboratory (Abstract: Ab-57)

1145 Questions to Panelists

1155 Announcements

1200 **Workshop Adjourns**

SHORT COURSE

March 25 - 26, 2000 Saturday and Sunday (0830 –1630)

MODERN SAMPLING TECHNIQUES FOR GAS CHROMATOGRAPHY

Nicholas H. Snow and Hans-Gerd Janssen

This course will include extensive discussions of classical and large volume injection techniques and extraction methods, including liquid-liquid extraction, solid phase extraction, solid phase micro-extraction, and headspace extraction. Time is provided for discussion and comparison of techniques and for the participants to share their own experiences.

Course Outline

March 25, 2000 – Modern GC Injection Techniques

0800	Registration – refreshments
0830	Introduction: Classical GC Injection Methods
0930	Break
0945	On-column and PTV Injection
1100	Fundamentals of large volume injections (LVI): On-column and PTV
1200	Lunch (<i>Lunch is provided with course registration</i>)
1300	Applications LVI
1400	Method Development in LVI
1445	Break
1500	Demonstrations
1600	Open Discussion
1630	End of first day

March 26, 2000 – Modern Extraction Techniques

0830	Liquid Extraction Techniques for LVI
0945	Break
1000	Introduction to SPME
1100	Applications of SPME
1200	Lunch (<i>Lunch is provided with course registration</i>)
1300	Headspace Extraction
1430	Break
1445	Sample prep alphabet soup: choosing the right method
1530	Demonstrations/open discussion
1630	End of program

SHORT COURSE

March 30, 2000 Thursday (0830 –1630)

MASS SPECTRAL DECONVOLUTION TECHNIQUES

O. David Sparkman and Jane Klassen

A day-long lecture will be presented on the use of the National Institute of Standards and Technology (NIST) Automated Mass spectral Deconvolution and Identification System (AMDIS). AMDIS is used for obtaining pure spectra from complex reconstructed total-ion-current (RTIC) chromatograms and allows the confirmation of the presence or absence of target analytes. It is helpful in the identification of unknown artifacts using the NIST Mass Spectral Search (MSS) Program for Windows and the NIST/EPA/NIH Mass Spectral Database (NIST 98) as well as custom libraries.

The use of these two powerful programs with various GC/MS instrument manufacturers' data systems will be explored. If you bring a laptop computer with a CD-ROM drive, you can install a complete working version of the two programs along with a demo version of the NIST 98 Mass Spectral Database and interact with the presentation.

Course Outline

0830	Overview of NIST Mass Spectral Database and AMDIS (Automated Mass Spectral Deconvolution and Identification System)
0900	Load program onto laptops, run example analysis of a Grob mixture, explain desktop / mechanics of AMDIS
1000	<i>Break</i>
1015	Discuss data file types, analysis types, analysis algorithm examples, compare quadrupole analysis to ion trap analysis
1200	<i>Lunch</i> (<i>Lunch is provided with course registration</i>)
1300	Discuss analysis settings
1330	Build library, library types, transfer user libraries from NIST MS Search program and AMDIS
1430	<i>Break</i>
1445	Interface with NIST MS Search program
1530	Examples, questions, special functions
1630	<i>End of program</i>

HANDS-ON TRAINING

March 27, 2000 Monday Afternoon (1330 –1630)

Pesticide Method Development Workshop - Agilent Technologies

C. Kai Meng

This workshop will give the attendees an overview of the tools and techniques to quickly identify 567 pesticides and suspected endocrine disrupters with minimum false positives and false negatives. The target audiences are method developers, instrument users, lab managers, and QA/QC officers.

Course Outline

1. Consumables and inlets
syringes, liners, and preferred consumables
standard GC inlet comparison
 μ ECD and fast oven ramp (240V and the oven insert)
2. Retention Time Locking (**RTL**)
GC reproducibility
concept and benefits
calibration process (GC and MSD, s/w demo)
before and after comparison
RTL precision
building and modifying the retention time table (RTT)
hands-on exercises (**PC**)
references
3. Method Translation (**MTL**)
software demo
scaling RTL methods and creating fast GC methods
case studies
hands-on exercises (**PC**)
4. Pesticide methods and databases
AED method and database (software demo)
MSD method and database (software demo)
case studies
hands-on searching exercises (**PC**)
scaled AED/MSD screening
App notes
5. Auto RTL dual column confirmation reporting (**PC**)

HANDS-ON TRAINING

March 28, 2000 Tuesday Afternoon (1330 –1630)

The Care and Feeding of Your HPLC – A Basic Guide to Getting the Most Out of Your HPLC System ! - Waters Corporation

Jim Savoy

This presentation will review most of the basic assumptions of HPLC and the precautions which, if followed, will give you the best performance that your system can provide. We will discuss solvent preparation, basic pump operation, different detector types and their basic operation. Simple HPLC troubleshooting will also be discussed.

TOURS

March 29, 2000 Wednesday Afternoon (1230 –1900)

Tour A: Yosemite National Park and Valley Tour

Entering Yosemite National Park through the southern entrance, you will see all of the highlights, including El Capitan, Half Dome, Bridalveil Falls, Yosemite Falls and Mariposa Grove of Giant Sequoias.

Tour B: Mariposa Old Town and Redwood Grove Tour

VISIT MARIPOSA, RELIVE THE DAYS OF THE GOLD RUSH!

Historical Mariposa still has the feel of the Gold Rush days. When you enter the town you will notice the old church on the hill built in 1890. The Old Jail built in the 1860's with granite stones was used until the 1960's and is still standing.

Quaint shops offer antiques, Indian Artifacts, gifts and local artists' work. Visit Mariposa Museum & History Center. You don't want to miss the opportunity to taste the local wine, at Radanovich Winery Tasting Room. The Vault is one shop ladies love to check out, unique apparel for all occasions and some with the Western look!

Weather permitting, we will visit Redwood Grove (3 miles round trip of moderate hiking to the old Giant Sequoias.)

♣ Dress comfortably for cool to cold weather.